PPA3

USER'S MANUAL

MA09-02/B
15/09/2011

CE

DAVI & CIA
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INDEX

Page

1. DESCRIPTION 2

2. INSTALLATION 3
2.1. Location and setting 3
2.2. Startup 3

3. OPERATION 4
3.1. Prices 4
3.2. Weight and height 4
3.2.1. Using the baby scale accessory 4
3.3. Printed results 4

4. SETUP 5
4.1. Accounting 5
4.2. Programming 5
4.2.1. Clock setting 6
4.2.2. Price programming 6
4.2.3. Programming the ticket 6

5. MAINTENANCE AND CLEANING 8
5.1. Paper roll change 8
5.2. Equipment disposal 9

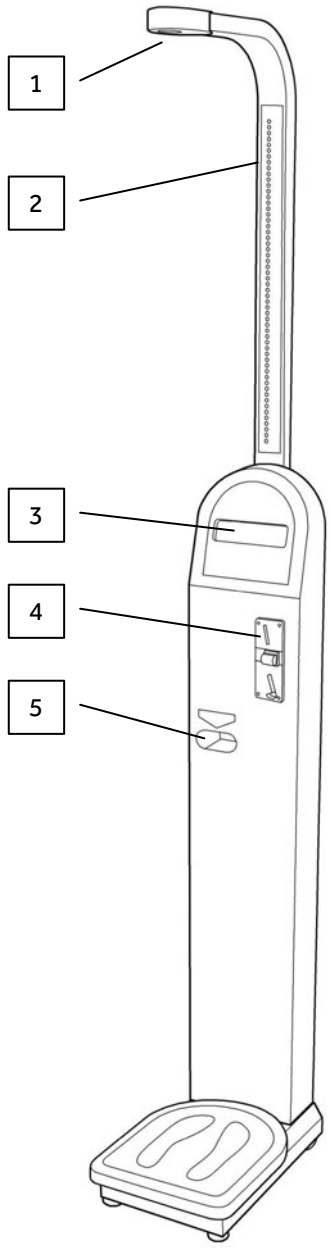
6. TROUBLESHOOTING 10

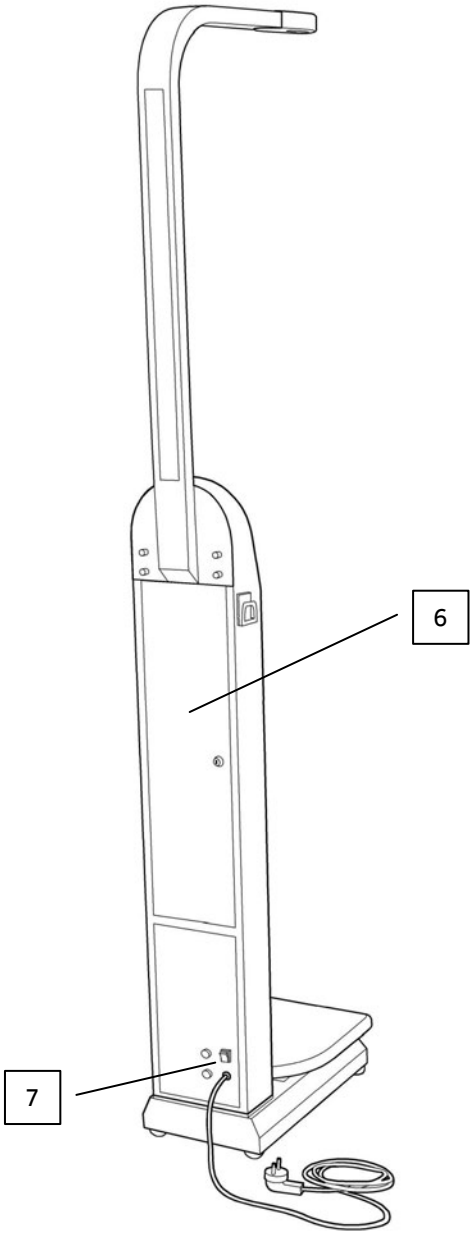
7. TECHNICAL SPECIFICATIONS 11

8. WARRANTY CERTIFICATE 13

9. CE DECLARATION OF CONFORMITY 14

1. DESCRIPTION





(1) Height meter sensor
(2) Height meter arm
(3) Display LCD
(4) Coin slot
(5) Ticket tray

(6) Access door for paper roll change
(7) Power switch, fuses, cable

2. INSTALLATION

PPA3 scale comes factory configured according to the voltage of each country and is ready for operation immediately after unpacking.
Connect the device to the power supply via the power supply cable. It is necessary that the outlet is provided with grounding. Adapters should not be used without grounding.

2.1. LOCATION AND SETTING

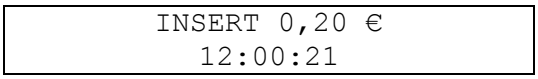
Set the equipment in a place flat and level, where it is perfectly supported. This last point is of vital importance to proper operation.
Make sure that within a radius of 70 cm around the equipment there is no interference that might affect the measurement of height.

2.2. STARTUP

- Connect the equipment to the power supply.
- Check that no objects are placed on the platform of the equipment.
- Actuate the switch on the bottom.
- At this point the equipment will perform the process of self-test.
- Step away from the equipment to not interfere in the process of auto-zero of the systems of weight and height.
- If the process of self-test completes successfully, the screen displays the price of the service and the current time.

3. OPERATION

After the equipment startup appears the home screen. **This means that the scale has done the calibration successfully and is ready for use.**



Home screen

3.1. PRICES

On the home screen appear the price information for the service (see 4.2.2. Price programming) and the current time (see 4.2.1. Clock setting).

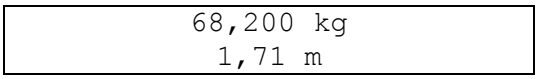
Upon reaching the programmed price by inserting coins or using a chip card, the service is activated automatically without pressing any key.

3.2. WEIGHT AND HEIGHT

Before starting the measurement, appear on-screen instructions for the correct posture we must take (step up to the platform, stand straight). After a few seconds, the measurement is carried out automatically.

IMPORTANT: By failure to follow directions, the measurement result could be altered.

At the end of the measurement, the result values are displayed.



3.2.1. Using the baby scale accessory

Preparation and precautions

- Raise the cradle of the baby scale
- Before placing the baby in the cradle, press it with your hand to ensure that it has been blocked
- While weighing the baby, watch his movements to prevent him falling from the cradle

Measurement

To weigh the baby, use the measurement option "Weight and height" as you would with an adult. The equipment detects that it is a weight below 15 kg, understands that we are weighing a baby then:

- The divisions are 10 g
- Only measures the weight, does not measure the height
- Overrides the process of measuring the body fat
- Gives us a baby scale ticket

The baby scale ticket contains a table of weights according to age and complexions ranging from 0 to 24 months old and is divided into 3 sizes: small, medium and large. It is divided by sex and always shows the 3 months which correspond to the weight of our baby.

3.3. PRINTED RESULTS

Upon completion of the selected measurements, the equipment automatically prints a receipt with the obtained results including the recommended values for each measurement performed.

4. SETUP

4.1. ACCOUNTING

To issue an accounting ticket for the equipment:

- Access the maintenance door used for the paper roll change (see 1. Description – # 6)
- Press the black button that is located among the internal wiring of the equipment
- When you press the button, the printer will issue three copies of a ticket with the accounting of the equipment

4.2. PROGRAMMING

To proceed to programming, we need the programming keypad that is supplied with your equipment.

With the equipment swiched off, connect the keypad to the CON1 connector as shown in the Figure.

Programming keypad

When starting up the equipment, it will begin with an autotest sequence and will display the following message :

```
DAVI & CIA
WAIT
```

After about 5 seconds the equipment starts to emit 4 "beeps". Right then, press the code "1111" (corresponding to the user menu) using the computer keypad.

```
1> CLOCK
2> PRICES        6> →
```

By pressing <6> appears the following screen:

```
1> TICKET
                 6> →
```

The options that are accessed through the user menu are:

CLOCK	Clock setting
PRICES	Price programming
TICKET	Programming the ticket

To exit the programming menu, press <STOP>.

Keypad operation

Programming is done using the main keypad, whose keys have multiple functions, numbers and letters.
Pressing more than once a number key, makes appear the various programmed characters (press the key once displays the first character, for the following characters press more times until the desired character appears).

4.2.1. Clock setting

If you select the **CLOCK** option, the display shows the following message:

```
DD/MM/YY
_
```

Where DD/MM/YY tells us in which format we must enter the new date. Introduce the data using the alphanumeric keypad: day, month and year in that order with two digits for each input. If we want to enter March 23, 2007, type out 230307.

After entering the date, the screen displays the following message:

```
HH:MM
_
```

Where HH:MM indicates the format in which we must enter the new time. Introduce the data using the alphanumeric keypad, first hour and then the minutes, in 24-hour format. If we want to enter the 3:35 pm, type out 1535.

Upon completion, it shows the entered data:

```
23/03/09
15:35:00
```

Press <START> to confirm.

4.2.2. Price programming

Using this option, you can set the pricing for the service. If you select the option **PRICES**, the screen displays the following message:

```
1> PESO, ALTURA
4> GRATIS
```

To set the price of the service, press <1>:

```
PRICES
PRICE = --,--
```

Use the keypad to introduce the value of the desired price, in the format indicated. Upon completion, press <START> for confirmation.

4.2.3. Programming the ticket

If you select the **TICKET** option, the display shows the following message:

```
1> TICKET
2> BARCODE
```

Programming the ticket lines

To program the ticket format and text press <1>. The following screen appears:

```
1> TICKET CLASS
2> PROGRAM
```

The options that are accessible through the menu are:

`TICKET CLASS` We can select the type of ticket that we want to print.
- Standard
- Reduced: For each measurement, shows the ideal value according to the result, but omits the complete tables of values and theirexplanation.

`PROGRAM` Programming the ticket lines

We have 30 ticket lines to program, 5 in the header and 25 on the bottom. We have 4 possible character types as the following:

Code	Sample	Character Type
0		Normal
1		Vertically expanded
2		Horizontally expanded
3		Doubly expanded

If you select the PROGRAM option, the display shows the following message:

```
LINE = _
TYPE  =
```

Introduce the value of line number and the type of character, the display shows:

```
L01/01>>_
PHARM_
```

We introduce the data that will appear in the selected line with the alphanumeric keypad. When finished, press <START> to confirm the data.

The screen displays the information of: Line number, column and character set for the pressed key.

NOTE: To enter a blank line is necessary to program at least one character of the line as "space". To delete a line simply enter the line and press <START> without programming any character.

Programming a barcode

To add a barcode on the bottom of the ticket, press <1>. The following screen appears:

```
1> LINE NUMBER
2> CODE
```

Press <1> to enter the line number at the bottom of the ticket where we want to display the barcode. Enter the value using the keypad (line between 7 and 20), then press START to confirm.
Press <2> and use the keypad to introduce the 12-digit barcode. Press START to confirm.

5. MAINTENANCE AND CLEANING

The only maintenance that can be performed by unqualified personnel is the change of paper roll.

Do not perform repairs on your own. In case of breakdown contact the Technical Support Service.

If the power cable is damaged, it must be replaced by the Technical Support Service or qualified personnel in order to avoid dangerous malfunctioning.

To ensure accurate results, the equipment PPA3 **requires an annual maintenance check that only authorized personnel from the Davi & Cia Technical Support Service can perform.**

Clean the unit using only a soft cloth. Do not use gasoline or any similar solvent.

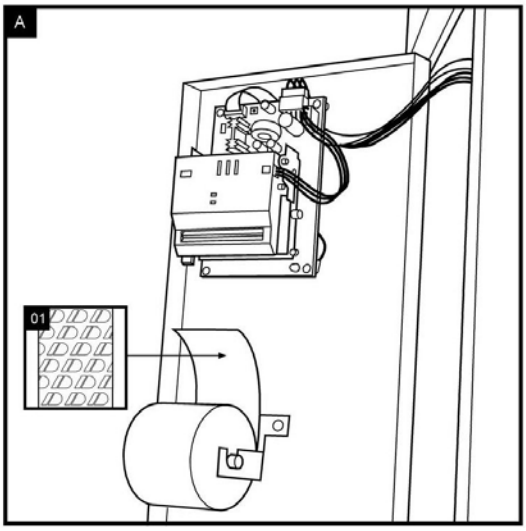
5.1. PAPER ROLL CHANGE

When the PPA3 runs out of paper, it stops working and the following message is displayed:

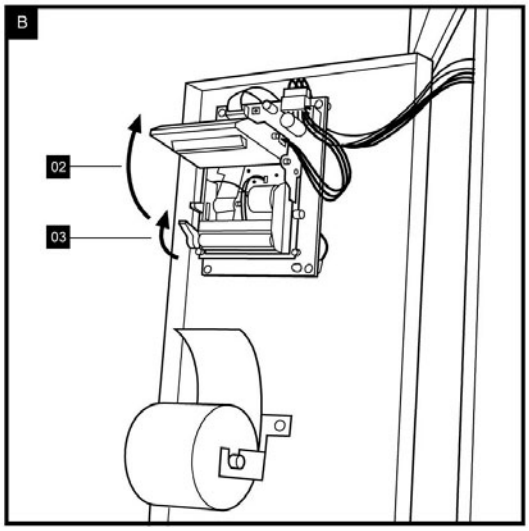
```
OUT OF ORDER
PRINTER
```

To change the paper roll:

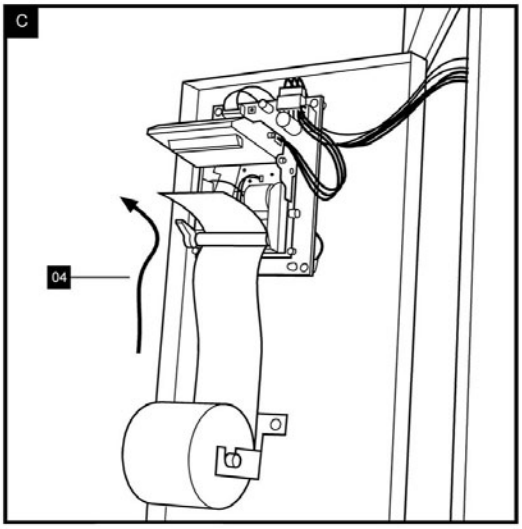
- Switch off the equipment
- Open the door to access the printer (see 1. Description - #6), the printer is inside at the top.



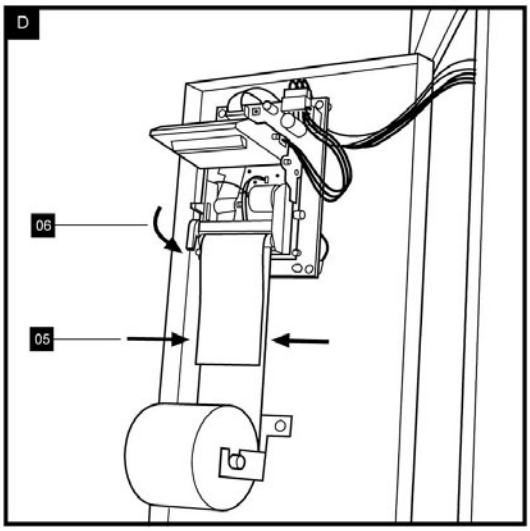
1. Place the paper roll



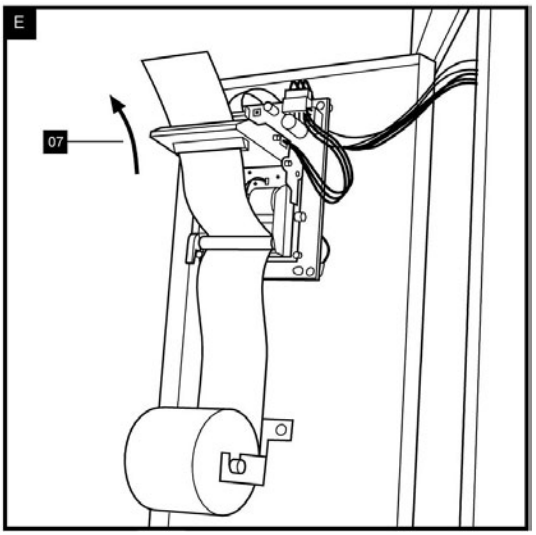
2. Lift the cutter cover
3. Raise the lever



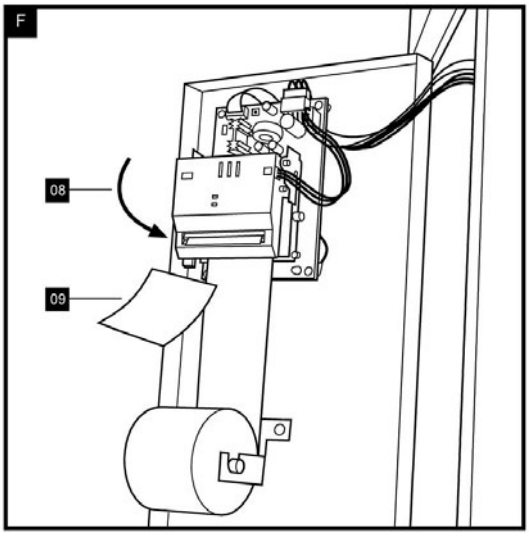
4. Insert the paper through the roller according to Figure



5. Make sure the paper is straight and in the centre
6. Lower the lever



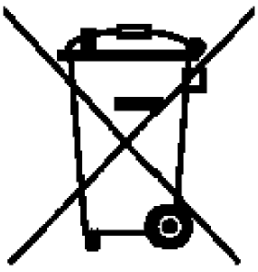
7. Insert the paper through the cutter as in the Figure



8. Close the cover
9. Cut off the piece of paper sticking out
10. Switch on the equipment

5.2. EQUIPMENT DISPOSAL

All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.



This crossed-out wheeled bin symbol on the product means the product is covered by the European Directive 2002/96/EC.

The correct disposal and separate collection of the equipment will help prevent potential negative consequences for the environment and human health. It is a precondition for reuse and recycling of used electrical and electronic equipment.

6. TROUBLESHOOTING

Error Indicator	Cause	Correction
WEIGHT ERROR CODE 01	Error weight reading	- Failure in load cell - Failure in A/D - Failure in load cell wires
OVERFLOW CODE 02	Weight over 225 kg	- Failure in load cell - Failure in A/D - Failure in load cell wires
UNDERFLOW CODE 03	Weight under 0 kg	- Failure in load cell - Failure in A/D - Failure in load cell wires - Failure in load cell mounting
ZERO WEIGHT ERROR CODE 04	Error in Zero reading at machine start.	- Failure in load cell - Failure in A/D - Failure in load cell wires - Failure in load cell mounting - Knocks in load cell
HEIGHT ERROR CODE 05	Height reading error.	- Failure in height cell. - Failure in height circuit. - Failure in height wires. - Failure in power supply +12V
E2PROM BASE_6 CODE 30	Error data in E2PROM BASE	- Error in E2PROM BASE
ERROR PRINTER CODE 40	Failure in PRN	- Comms error in PRN - Power failure in PRN
NO PAPER CODE 41	Paper feed failure	- Paper finished - Paper feed failure - Paper detector failure
UNKNOWN ERROR CODE 99	Unknown error	

7. TECHNICAL SPECIFICATIONS

Model:	PPA3
Manufacturer:	DAVI & CIA C/Murcia 35 nave G E08830 Sant Boi de Llobregat Barcelona – SPAIN
Display:	LCD 2 x 16 characters
Weight:	50 kg (aprox.)
Maximum external dimensions:	64 x 37 x 234 cm
Measurement range: Weight: Weight (baby scale): Height:	 2.5 to 225 kg in div.100 g 2.5 to 15 kg in div. 10 g 0 to 210 cm in div. 1 cm
Measurement methods: Weight: Height:	 300 kg load cell Ultrasound
Measurement accuracy: Weight: Height:	 +/- 100 g , n=3000 +/- 1 cm
Power supply:	230V~, 50 Hz 115V~, 50/60 Hz
Consumption:	In operation, max. 40 VA
In operation: Temperature: Humidity:	 0 °C to +40 °C 30 % to 75 %
Printer:	Thermal printhead 8 dots/mm. 384 dots/line, 32 characters per line. Speed = 40 mm/s. Paper end detection using a photoelectric cell.
Paper width:	57 mm (57 x 192 x 17.5 mm)
e: d: Min: Max. Class:	100 g / 0,2 lb 100 g / 0,2 lb 2.5 kg / 5,5 lb 225 kg / 500 lb III
Fuses primary circuit: Power supply 230V: Power supply 115V: Fuses secondary circuit: (On board):	 2 x 0.400 A 5 x 20 mm, type T 2 x 0.750 A 5 x 20 mm, type T 1 x 2.0 A 5 x 20 mm, type M
Classification according to EN 60601-1	Electronic scale with height meter. Equipment with metallic envelope and Class I of protection against electric shock. Protection against electric shocks Type BF.
Applicable Standards:	*SEGURIDAD ELÉCTRICA / Electrical security:* UNE EN 60601-1: 2008+ERRATUM:2008 EN 60601-1-2 (2007): *EMISIÓN ELECTROMAGNÉTICA / EM Emission.* -EN 55011 (2007) / A2 (2007): Radiada / Radiated (Clase B/Class B). -EN 55011 (2007) / A2 (2007): Conducida / Conducted (Clase B/Class B). -EN 55014-1 (2006): Conducida discontínua / Discontinuous Conducted (Clase B/Class B). -EN 61000-3-2 (2006): Armónicos / Harmonics (Clase A/Class A).

	-EN 61000-3-3 (1995) / A1 (2001) / A2 (2005): Fluctuaciones de tensión y flickers / Fluctuations and flickers. *INMUNIDAD ELECTROMAGNÉTICA / EM Immunity.* -EN 61000-4-2 (1995) / A1 (1998) / A2 (2001): Descarga electrostática / ESD; -EN 61000-4-3 (2006): Campo radiado EM de RF / EM radiated field of RF; -EN 61000-4-4 (2004); Ráfagas de transitorios rápidos / EFT burst; -EN 61000-4-5 (2006); Ondas de choque / Surges; -EN 61000-4-6 (2007): RF en modo común / RF common mode; -EN 61000-4-8 (1996) / A1 (2001); Campo magnético a 50 Hz / 50 Hz H field; -EN 61000-4-11 (2004); Interrupciones de alimentación / Dips, interruptions.

8. WARRANTY CERTIFICATE

We provide a **1-year** guarantee from the date of purchase. The guarantee covers manufacturing defects or defects occurring as a result of normal use and operation.

It excludes all removable parts such as batteries, wires, power supply devices, etc. Faults falling within the guarantee period shall be rectified free of charge upon presentation of the purchase receipt for the appliance. No other rights can be taken into consideration.

Return shipment is at the customer's expense if the appliance is anywhere other than at the customer's headquarters.

In the event of damage during shipment, guarantee rights will be granted only if the appliance is shipped in the original packaging. You are therefore recommended to keep the original packaging.

Following expiry of the guarantee period, all services requested will be dealt with by our specialist technicians at the user's expense.

9. CE DECLARATION OF CONFORMITY

FABRICANTE PRODUCTO: DAVI & CIA S.L.
PRODUCT MANUFACTURER:

DIRECCIÓN: C/ Murcia, 35, Nave G
ADDRESS Polígono Industrial Can Calderón
E08830 Sant Boi de Llobregat
BARCELONA - ESPAÑA

DECLARAN BAJO SU RESPONSABILIDAD QUE EL PRODUCTO:
DECLARE UNDER THEIR RESPONSIBILITY THAT THE PRODUCT

Nombre PPA3
Name

Tipo EQUIPO ELECTROMÉDICO / MECÁNICO
Type Electromedical / mechanical equipment

Finalidad Prevista Equipo pesapersonas incorporando tallímetro.
Intended Use *Weighing scales incorporating height rod.*

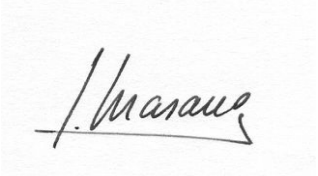
CUMPLE LOS REQUISITOS DE LAS DIRECTIVAS:
CONFORMS WITH THE REQUISITES OF THE DIRECTIVES

Pesapersonas, Tallímetro (*Weighing scales, Height rod*)

EC Directive 2004/108/CE Directiva de Compatibilidad Electromagnética *(Electromagnetic Compatibility Directive)*

EC Directive 90/384/CEE Directiva de Instrumentos de Pesaje No Automático *(Non-Automatic Weighing Instruments Directive)*

FECHA: 15 de Abril de 2010 ***DATE:*** 15th *April 2010*

Nombre: ***Name***	J.Masana
Firmado: ***Signed***	
Cargo: ***Function***	**Director** DAVI & CIA

This manual and other support documents are available on the web

www.davicia.com

DAVI & CIA

C/ Murcia, 35 Nave G Pol.industrial Can Calderón. Tel. +34 93 654 32 32 info@davicia.com
E 08830 Sant Boi de Llobregat. Barcelona. Spain Fax. +34 93 654 16 62 www.davicia.com